## Appendix E

### **Land Protection Plan**



### United States Department of the Interior

### FISH AND WILDLIFE SERVICE Washington, D.C. 20240



6 2004

In Reply Refer To: FWS/ANRS-CPP/017063

Memorandum

To:

Director

From:

Assistant Director, National Wildlife Refuge System

Subject:

Recommendation to Approve the Land Protection Plan, Eastern Shore of

Virginia National Wildlife Refuge, Northampton County, Virginia.

I concur with the attached Land Protection Plan (LPP) for Eastern Shore of Virginia National Wildlife Refuge dated March 2002, and recommend that you approve the plan. The LPP will add approximately 6,030 acres of grasslands, marshlands, forests and scrub habitat to the current acquisition boundary of the refuge. The majority of these lands will be conserved via conservation easements. The LPP was developed as a part of the Comprehensive Conservation Plan (CCP) released for public comment on September 19, 2003. This approval will allow the draft CCP to be finalized.

This plan is the result of several years of planning effort by the Service, State of Virginia, local governments and non-government organizations and, when implemented, will provide long-term protection for habitat that is used by numerous species of shorebirds, neotropical migratory birds, waterfowl, finfish and shellfish.

Concur/Do Not Concur:

M

MAY 2 4 2004

DIRECTOR

## Land Protection Plan Eastern Shore of Virginia National Wildlife Refuge

#### I. Introduction

This Land Protection Plan (LPP) identifies an expanded acquisition area for the Eastern Shore of Virginia National Wildlife Refuge (NWR), as proposed in our Comprehensive Conservation Plan (CCP) for the refuge.<sup>1</sup> The purpose of this LPP is to:

- provide landowners and the public with an outline of U.S. Fish and Wildlife Service (Service, we, our) policies, priorities and potential protection methods for lands within the project area.
- assist landowners with determining whether or not their property is within the proposed boundary.
- inform landowners about our long-standing policy of acquiring land only from willing sellers. [No purchase of land or easement will occur if an owner is not interested in selling.]

The LPP presents methods that the Service and interested landowners can use to accomplish wildlife habitat objectives within the proposed boundary. Maps and a table with ownership information are included to help landowners understand our interest in conservation of these lands.

The maps (Appendix A) show the existing refuge, our proposed acquisition boundary, and the land parcels within this area. A corresponding table identifies each parcel, its tax map number, acreage, ownership, and our priority and recommended option for habitat protection.

Lands or conservation easements acquired will be managed to provide critical stopover habitat, in support of the millions of birds that funnel

<sup>1</sup>USFWS Region 5 Eastern Shore of Virginia and Fisherman Island National Wildlife Refuges Comprehensive Conservation Plan (Hadley, Massachusetts: April 2004). through this key migration site. Some lands may also be managed for threatened and endangered species, or to maintain significant natural resources such as wetlands and related wildlife, or to provide public use opportunities. We propose to develop cooperative management agreements with State agency partners responsible for conservation lands in the project area.

#### **II. Project Description**

#### **Existing Refuge**

The refuge is located on the southern tip of the Delmarva Peninsula in Northampton County, Virginia, at the mouth of the Chesapeake Bay (Bay). Currently, the refuge consists of 1,121 acres, including deciduous and evergreen forest, myrtle and bayberry thicket, grassland, ponds with associated fresh marsh, tidal salt marsh and beach habitats. It was established in 1984 through a transfer of excess military land, the former Cape Charles Air Force Station, for the following purposes:

- to conserve, manage and enhance habitat for use by endangered and threatened species, migratory birds and other species of fish and wildlife.
- to encourage a natural diversity of habitat and associated fish and wildlife species.
- to fulfill the international treaty obligations of the United States relating to fish and wildlife.
- to provide fish and wildlife-oriented recreation and education.

Recent land acquisition activities have included:

- purchase of the Wise Point Corporation property (376 acres, 2001), located within the acquisition boundary approved for the refuge in 1984;
- donation of two properties as mitigation for refuge habitat lost to bridge construction, added to the refuge as Categorical Exclusions under National Environmental Policy Act

- procedures. The first is an agricultural parcel (74 acres, 1995) directly north of the visitor center, which is being restored to wildlife habitat:
- the second is a 2 ½-mile section of the 66'-wide abandoned railroad right-of-way (20 acres, 1997), from the refuge to Cedar Grove.

The existing acquisition boundary approved in 1984 included 1,337 acres (estimate, not surveyed acres). There are four remaining unacquired parcels within this original boundary (310 acres): one private ownership (160 acres, Holly Bluff Island), Northampton County ownership (60 acres, Raccoon Park), a tract of State-owned marsh between the two (approximately 89 acres), and a small electrical substation tract (1 acre) owned by Eastern Shore Public Service Company of Virginia. Although within the original boundary, the four parcels are incorporated into this proposal and listed as the first four tracts in the table.

#### **Proposed Expansion**

Within the mid-Atlantic Region, the lower Cape May and Delmarva (Cape Charles) peninsulas are the most significant bird migration bottlenecks known, concentrating large numbers of migrants at their southern tips. Stopover habitats at these points are critical to fall migration, and are considered some of the highest conservation priorities in eastern North America.

Due to geographic configuration, the lower Delmarva peninsula provides critical habitat for large concentrations of raptors, songbirds, other migrant landbirds, shorebirds, woodcock, and waterfowl. The southern tip has been designated an Important Bird Area by the American Bird Conservancy / National Audubon Society, in conjunction with the Partners-In-Flight (PIF) program. Many of these in-transit migrants are PIF priority species breeding in physiographic areas / Bird Conservation Regions throughout the northeast. Protection of habitat at this key stopover site is critical to the conservation of both temperate and neotropical migratory birds.

The importance of the area is also reflected in the following designations for the surrounding barrier

island / marsh-lagoon system: North American Waterfowl Management Plan focus area (Atlantic Coast Joint Venture); Western Hemisphere Shorebird Reserve Network site; United Nations Bioshpere Reserve and National Natural Landmark (TNC Virginia Coast Reserve); RAMSAR site (Chesapeake Bay); Emergency Wetlands Resources Act priority site (Regional Wetlands Concept Plan). The lower county was designated as a Special Area Management Plan site, with funding and support from Virginia's Coastal Program and NOAA, which have supported several bird studies.

A primary purpose of the refuge, situated at the tip, is to provide habitat for migrants. Several studies, including the 4-state Neotropical Migratory Songbird Coastal Corridor Study, have identified habitat protection in the vicinity of the refuge as a critical need. They show that the highest concentrations of migrants occur within a 10 kilometer (6.2 miles) zone closest to the tip, in a 1.5 km wide strip (0.9 mi) bordering bayside and seaside coastlines. Because of the concentration effect, protection or restoration of habitat of any size or configuration within this "10 km zone" is important.

This LPP identifies a 6,030-acre acquisition area for the refuge, based on the 10-km zone, which will allow the Service to protect or restore additional migration habitat within the critical area of the southern tip. This will be accomplished through the acquisition of lands, conservation easements, or development of cooperative agreements.

The proposed acquisition area also provides important breeding and wintering habitat, and supports species of concern at both the federal and state levels, including the Bald eagle (Elliott's Creek area) and northeastern beach tiger beetle (Bay beaches).

#### III. Status of Resources to be Protected

Although most of the Eastern Shore's barrier island and marsh system is protected, studies and experts agree on the urgent need for protection of critical forested and shrub migration habitat at the southern tip.

Historically, Northampton County has been a rural community with agriculture and seafood providing the basis of the economy. Cropland and woodland are the predominant land covertypes within the proposed refuge expansion boundary, occupying 62% and 34% respectively of the land area (tidal marsh excluded) within the boundary.

Until recent times, the area had remained a relatively isolated rural agricultural area because of limited access. Construction of the Chesapeake Bay Bridge linking Washington/Baltimore with the Delmarva Peninsula, and the Chesapeake Bay Bridge-Tunnel (CBBT), linking Hampton Roads with the lower peninsula in 1964, increased the accessibility and exposure of the area. The Chesapeake Bay Bridge-Tunnel District recently completed a second bridge crossing (1998), and implemented a 24-hour round trip commuter toll (2002).

According to the recent Toll Impact Study, annual traffic on the CBBT has nearly tripled since its opening in 1964, and total traffic has increased nearly 15 percent since 1990. This trend is expected to continue, with through traffic predicted to double through 2020.

These changes have resulted in a marked recent increase in development pressure in the southern tip area. Low land prices, access to the Bay and ocean, and proximity to major population centers (Washington/Baltimore, Philadelphia/New Jersey and Norfolk/Tidewater) have drawn attention to the area by investors, second-home buyers, and retirees. Large land parcels in the vicinity of the refuge are now rapidly being subdivided and/or developed.

We recognize previous land use patterns and stewardship by local landowners as having maintained the unique wildlife values of this area in the past. However, farms and family lands, previously maintained as larger rural parcels compatible with wildlife use and public access, are slowly being subdivided and developed.

This situation is resulting in a cumulative loss of important forested and shrub migration habitats and further fragmentation. Opportunities for restoring these habitats from agricultural lands, at the critical southern tip, will also be lost. Loss of stopover habitat at concentration sites such as this will likely result in irreversible negative impacts to neotropical and short distance migrant species, many of which are identified as Partners-in-Flight priorities.

According to the Toll Impact Study, real estate experts have suggested that the price of bayfront property has tripled over the past two to three years, sold to second home buyers, retirees and investors. Other comments were made that the county experienced the highest level of market activity (land sales) in its history in 2000, and that there are few bayfront properties left on the market. The effects of the toll discount are likely to be long-term induced development. The toll study predicts that increases in tourism, second home development, and full-time residential population will impact carrying capacity of schools, aquifers, septic and sewer systems, road facilities and land resources.

#### IV. Proposed Action and Objectives

The Service will acquire lands or conservation easements from willing sellers, within the 6,030-acre proposed acquisition boundary. These lands will be managed as part of the Eastern Shore of Virginia NWR, as discussed in the attached CCP. Cooperative management agreements will be used in some cases.

Our objectives are:

 Protect existing forest and shrub migration habitat, located within the southern 10 km of

- the peninsula, identified as critical to migrant landbirds.
- Restore forest and shrub habitat from agricultural lands within this same area, to widen/reconnect the vegetated migration corridor (particularly along the bayside).
- Restore several large grassland tracts from agricultural lands as opportunities occur, to provide migration, breeding and wintering habitat for declining grassland bird species.
- Protect known sites of threatened or endangered species and rare natural communities (e.g., Bald eagle and tiger beetle nesting sites).

Acquisition of lands in the proposal area will prevent significant loss of important habitat, and allow restoration of additional habitat necessary to support large concentrations of migratory birds.

#### Proposed Acquisition Area

The proposed acquisition area is based upon the 10km zone identified as critical to migrants. The boundary has been adjusted to correspond to property boundaries and identifiable features, such as roads. It extends from the tip of the peninsula north along the Chesapeake Bay shoreline to Plantation Creek, and north along the seaside shoreline up to Walls Landing Creek, just south of Capeville. It is bounded along the bayside by Route 645, and along the seaside by Route 600.

We are not interested in acquiring developed lands in the vicinity of villages or subdivisions. Our interest is to protect and restore wildlife habitat. Therefore, certain lands have been excluded from the refuge acquisition area. These are the rural village districts, as designated by Northampton County, including Cedar Grove, Magotha, Townsend, Capeville, and Cheapside. Also excluded are the bayshore subdivisions of Latimer's Bluff, Butler's Bluff, Bay Ridge, Guy's Landing, Elliott's Creek, Sugar Hill, Chesapeake Shores and Arlington Plantation.

In addition to the refuge, other conservation lands exist in the vicinity of the southern tip, including Kiptopeke State Park (535 acres), the GATR Tract (356 acres, part of the state's Mockhorn Wildlife Management Area), and the Trower Natural Area

Preserve (35 acres). These lands are not included in the refuge acquisition area. However, we are proposing to develop cooperative management agreements with the agencies responsible for these lands, to acknowledge a common goal of providing habitat for migrants. The agencies include the Department of Conservation and Recreation, both the Divisions of State Parks and Natural Heritage, and the Department of Game and Inland Fisheries.

#### Land Cover / Land Use

The majority of the lands included within the proposed acquisition area are undeveloped forest, farmland, and wetland. General land cover, land use, and wetland types within the proposed acquisition area are summarized in Tables 1 and 2. Forested habitats are dominated by mixed hardwoods and loblolly pine, with an associated shrub understory. These habitats are important to migrants. Of the approximately 1,810 acres of forest within the proposal, 460 acres are forested wetland. Over half of the land is agricultural cropland, 55%. These lands represent the potential to restore needed habitat within this critical geographic area.

**Table 1.**—General land use / land cover categories within the proposed acquisition boundary

Land cover / land use	Acres	%
Forested	1,810	30
Agricultural	3,315	55
Tidal Marsh	725	12
Open Water	120	2
Other	62	1
Total	6,032	100

Table 2.—Wetland habitats within the proposed acquisition area

Wetland type	Acres	%
Forested wetland	460	8
Tidal Marsh	725	12
Open Water	120	2
Shrub/freshwater marsh/meadow	25	<1
Total	1,330	23

#### Maps and Ownership Table

Maps and a table listing all land parcels are provided in Appendix A. Both maps and table were produced using Northampton County tax parcel boundaries and tax database information. These are provided to inform landowners of our interest in lands within this area.

Each parcel is identified on the maps with a number which is keyed to the table, listed in the first column as LPP number (LPP NO.). The following information is provided in the table:

- Northampton County tax map, or "insert" number
- County tax parcel number
- Owner's last name
- Acreage of the parcel
- Service priority for acquisition the importance of the parcel to the project
- Proposed acquisition or protection method
- Zoning designation

#### **Land Protection Priorities**

As land parcels within the proposed acquisition area are offered to the Service, and as funds become available, acquisition priority will be based on habitat type and location, as follows:

**Priority 1:** Parcels with significant (over 1 acre) tracts of existing forested or shrub migration habitat, located at the southern tip (from Cedar Grove south) and along the bayside shoreline (between the bayshore and Route 645, north to Plantation Creek). This area supports higher densities of high-volume migrants than the seaside (approximately 3:1) for two main reasons:

1) greater forest and shrub understory diversity, producing more food, and 2) a "reverse migration" phenomenon causing re-distribution of migrants into bayside habitats. In addition, this is a high priority because the threat of habitat loss to subdivision and development is more immediate.

**Priority 2:** Parcels with significant (over 1 acre) tracts of existing forested or shrub migration habitat, located along the seaside coastline (between the seaside coastline and Route 600, from Cedar Grove north to Walls Landing Creek). While still within the critical lower 10k area, bird densities are not as high as on the bayside. Also, due to topography, this side of the peninsula supports more extensive forested/shrub wetland transition zone grading into tidal marsh, and offers greater opportunity for wetland and riparian buffer restoration.

**Priority 3**: Parcels that consist of predominantly agricultural land with no existing forest or shrub (less than an acre) and no coastal connection. Although unvegetated, these lands are important because they offer the opportunity to restore migration habitat within the 10km geographic area. Such opportunities are important to attempt to offset future habitat losses to subdivision and development within this area.

**Priority 4:** Those relatively small parcels, generally less than 5 acres, that include collections of buildings such as residences, farm houses, barns, various tractor and equipment sheds, farm storage or processing buildings. Our intention is not to acquire residences and buildings, but to protect or restore habitat, so these parcels will be evaluated on a case-by-case basis.

Table 3 presents a summary by method and priority. See Appendix A for the details on each parcel. The CCP will incorporate our approved final LPP as a management action in support of land protection goals and objectives.

**Table 3.**—Acquisition Area Summary, by Method and Priority

Priority	Method	Acres	Parcels
1	Cooperative Agreement	122	2
1	Fee	1	1
1	Easement	41	1
1	Fee or Easement	4,743	98
2	Fee or Easement	668	18
3	Fee or Easement	424	45
4	Fee	33	21
Total		6,032	186
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#### V. Protection Options

The following protection options were considered in the development of our proposed action, presented in detail in Appendix A. They include:

- no Service action
- management or acquisition by others
- less-than-fee acquisition by the Service
- fee acquisition by the Service

Service land protection policy is to acquire only the minimum interest necessary to meet the refuge's goals and objectives, and only from willing sellers.

We are proposing varying levels of Service action within the project area. A combination of the protection options outlined below will be used, including assistance and support to conservation partners and landowners, acquisition and management by others, and purchase of lands or conservation easements by the Service.

We believe this combination approach is a costeffective way of providing the minimal level of protection needed to accomplish project objectives, while also attempting to meet the needs of landowners. As parcels become available in the future, however, changes in the protection option for a specific parcel may be warranted to ensure we are using the option that best fits the situation at that time.

#### Option 1.—No Action

Under Option 1, we would maintain present refuge acquisition boundaries; we would not expand the refuge or otherwise attempt to protect additional migration habitat. Our draft CCP/EA evaluates this option as "Alternative A: No Action (Current Management)." We did not select this approach as our proposed action because:

- It will not adequately protect important migration habitat, Bald eagle and tiger beetle nesting sites, and wetland habitat in the project area;
- Service action has been recommended and supported by our State and non-profit conservation partners, as part of a cooperative effort.

Regulatory land use controls do exist for the area, including county zoning and Chesapeake Bay Preservation Act restrictions. The County's Comprehensive Plan reflects local support of the area's natural resources (including migratory birds), seen as vital to the community's economic well being. Because of accelerating development pressures, a proposed new zoning overlay, called the Southern Tip Rural District, is currently under consideration to help protect sensitive natural areas, vegetative cover, and habitat.

However, much of the project area is highly developable upland, either forestland or prime agricultural soils. Further subdivision, forest clearing, and residential development is allowable within the proposed 6,032-acre acquisition area under current zoning regulations. Zoning within the area is as follows.

Table 4. — Zoning status

Zoning Designation	Acre s	%
Agricultural (A-1)	3,856	63
Agricultural Forest District (AFD)	1,650	27
Residential (RV-R)	232	4
Exist. Business- Commercial General (EB-CG)	41	< 1
Conservation (C)	310	5

The majority of lands within the project area, over 90 percent, are zoned Agricultural (A-1) and Agricultural/Forestal District (AFD). While the county does place importance upon preserving prime agricultural soils and woodland, the Agricultural zoning allows an overall residential density of one unit per 20 acres. Sliding scale "bonus" lots of 20,000 square feet may be divided from parcels, based on buildable area, with parcels as small as 7 acres possibly supporting 2 lots.

The Agricultural/Forestal District is an overlay district intended to support continued agricultural and forestry use through reduced-tax status. Lands can be removed from the program for subdivision and development, however, with payment of back taxes.

The Chesapeake Bay Preservation Act (1988) provides for protection of high-quality state waters, through pollution reduction regulations and development restrictions within designated Resource Protection Areas. These include shoreline, tidal wetlands, and 100-foot buffer zones. Northampton County also applies this status to the seaside, and adjacent Resource Management Areas have been designated. In reality, development or clearing of shorelands has continued throughout the state under these designations, which have not been strictly enforced with variances often granted.

The lower peninsula is presently threatened by rapid commercial and residential development which, in its present form, is incompatible with the maintenance of vegetated stopover habitat. Large tracts within the project boundary are being subdivided or developed, resulting in a cumulative loss of key habitats.

The October 2001 Chesapeake Bay Bridge-Tunnel Commuter Toll Impact Study projected that the lower third of the County would attract 70 percent of the new residential and commercial growth induced by reductions in the Bridge toll. As a result, up to 45% of the undeveloped land in this part of the county will be permanently converted if no action is taken.

The study estimated that new development could eventually occupy up to 10,536 acres of farmland and forests. The bayside tracts most critical to migratory songbirds are already being subdivided at a rapid pace, and land prices have escalated since implementation of the commuter toll, March 2002.

### Option 2.—Management or Acquisition by Others

Under Option 2, we would continue to support the activities of our partner organizations and agencies within the project area, such as the Virginia Department of Game and Inland Fisheries, the Virginia Department of Conservation and Recreation (DCR), the Virginia Natural Heritage Program, the Virginia Coastal Program, The Nature Conservancy, the USDA Natural Resource Conservation Service, and interested local landowners.

Recent support provided by the Service for land protection projects in Northampton County has included: a \$798,000 National Coastal Wetland Grant for the conservation component of the county's Sustainable Technologies Park; similar grants to Virginia DCR's Division of Natural Heritage for Savage Neck and TNC for Elkins Marsh; and active support and participation in the addition of the Parsons property to Kiptopeke State Park. TNC and the Trust for Public Lands have historically provided land acquisition support to the refuge.

Although our partners provide land with some level of protection, they often do not have the financial or administrative resources to buy all those lands, nor can they always actively manage the parcels to protect our priority species. The proposed action (Appendix A) assumes these groups will continue to buy lands in the project area, subject to their own funding limitations. However, without our contribution to land protection, many lands identified as important to wildlife would likely be converted to other uses. The collective partnership effort has identified a Service acquisition and management role as critical to long-term protection of these significant natural resources.

While the Service already has a cooperative management agreement in place for the county's Raccoon Park tract adjacent to the refuge, we propose to develop similar cooperative agreements with: 1) the Department of Conservation and Recreation for Kiptopeke State Park; 2) the Department of Game and Inland Fisheries, for the Mockhorn Wildlife Management Area tract north of the refuge, and a marsh tract within the acquisition boundary south of the refuge (LPP tract 1); and 3) the Virginia DCR Division of Natural Heritage for the Trower Natural Area Preserve. We can agree to work together to complement each other's management approaches and activities, to the extent possible, in support of the area's migratory bird resources.

#### Option 3.—Less-than-fee Acquisition

Under Option 3, we would accomplish our habitat objectives by purchasing only a partial interest, a conservation easement. The parcel would remain in private ownership, while allowing us some ability to manage land use. The easement would be structured to assure the permanent protection of existing forested and shrub habitat, allow habitat management/improvement, manage access if endangered or threatened species are present, and possibly provide limited public use opportunities if the landowner is willing.

In order to accomplish these objectives, we would purchase the development and timber rights, and possibly access or hunting rights. Easements are property rights and are usually perpetual. If a landowner sells his/her property after selling an easement to us, the easement continues as part of the title. Properties subject to easements generally remain on the tax roll, although the assessment may be reduced by the reduction of market value. The Service does not make revenue-sharing payments for easement rights.

In general, an easement would maintain the land in its current configuration with no further subdivision. Easements are appropriate for use where:

 Only minimal management of the resource is needed, such as in places where the

- management objective is to allow forest to remain and provide habitat for migratory and resident songbirds;
- A landowner is interested in maintaining ownership of the land, does not want it to be further developed, and would like to realize the financial benefits of selling development and timber rights.

For parcels with lands in agriculture, the landowner could retain agricultural rights and continue farming, or sell those rights to us. In the latter case we would restore the farmland to vegetated habitat over time.

Determination of value for purchase of a conservation easement involves an appraisal of the rights to be purchased, based on recent market conditions in the area.

#### **Option 4.—Fee Acquisition**

Under Option 4, we would acquire parcels in fee title from willing sellers, thereby purchasing all rights of ownership. Fee ownership will assure the permanent protection of existing forested and shrub migration habitat, and allow refuge staff to:

- conduct activities such as habitat management/improvement.
- provide public use opportunities and manage
- and manage for endangered or threatened species.

Fee purchase, at market value, is the most expensive method but allows the Service maximum management flexibility. This method would allow us to conduct active habitat improvement projects, such as thinning of dense pine overstory to promote understory shrub growth for migrants, and invasive plant management in general. It would allow the greatest ability for the refuge to provide additional public use opportunities. It would also provide the opportunity to restore some agricultural lands to forest and shrub, within this critical stopover area.

In most cases, for privately-owned parcels within the proposed boundary that contain tracts of forest critical to migrants, either fee purchase or conservation easements could accomplish our habitat protection objectives. Both are listed in appendix A interchangeably as options, to better meet the needs of landowners.

It may become necessary in the future to convert a conservation easement to fee acquisition. For example, when an owner is interested in selling the remainder of interest in the land. We will evaluate this need on a case-by-case basis.

#### **Options Considered but Dismissed**

We considered the action of leasing farmlands to restore migration habitat, such as possibly "resting" farm fields and rotating them out of production for a number of years to provide grassland habitat for birds. A lease would be a short-term (usually 5 to 10 years) agreement for full or specified use in return for a rental payment (usually annual) and generally includes occupancy rights. The rights revert back to the owner at the termination of the lease. This device is useful when the objectives are short term. The property remains on the tax rolls during the term of the lease.

This method does not offer permanent long-term protection and does not appear to be cost effective, given limitations on use and amounts of funding available. However, we plan to promote and facilitate habitat restoration programs offered by the Natural Resources Conservation Service, the Farm Services Administration, and our own Partners for Wildlife program within the project area. The refuge will assist interested landowners with existing programs that provide funding, materials, and technical assistance to restore permanent riparian buffers and other vegetated habitats, such as the Conservation Reserve Program and Wetland Reserve Program.

#### **VI.** Acquisition Methods

We can use four methods of acquiring either a full or partial interest in parcels within the proposed acquisition boundary, if landowners are interested: (1) purchase (e.g., fee title, or a partial interest like a conservation easement), (2) donations, (3) exchanges, and (4) transfers. Our proposed method has been listed in Table 1 for each tract within the refuge acquisition boundary.

#### **Purchase**

For the majority of tracts within the boundary, the proposed method is listed as **Fee** or **Easement**. For those parcels we can accomplish our objectives through either method. The method used is partly dependant on the landowner's wishes.

Fee purchase involves buying the parcel of land outright from a willing seller in fee title (all rights, complete ownership), as the availability of funding allows. Fee ownership will assure the permanent protection of existing forested and shrub migration habitat, and allow refuge staff to conduct activities such as habitat management/ improvement, provide public use opportunities and manage access, and manage for endangered or threatened species. It would also give the Service the ability to restore some agricultural lands to forest and shrub, within this critical stopover area.

Easement refers to the purchase of limited rights (less-than-fee) from an interested landowner. The landowner retains ownership of the land, and would sell certain rights to the Service, to be identified and agreed upon by both parties. Our conservation easement objectives would again be to assure the permanent protection of existing forested and shrub habitat, allow habitat management/improvement, manage access if endangered or threatened species are present, and possibly provide limited public use opportunities if the landowner is willing.

In order to accomplish these objectives, we would be willing to purchase at least the development and timber rights, and possibly the ability to control access or manage hunting. Easements are property rights and are usually perpetual. If a landowner sells his/her property, the easement continues as part of the title. Properties subject to easements generally remain on the tax rolls, although the assessment may be reduced by the reduction of market value. The Service does not make revenue-sharing payments for easement rights it owns.

Funding for Fee or Easement Purchase
Much of our funding to buy land comes from the
Land and Water Conservation Fund (LWCF),
which is derived from certain user fees, proceeds
from the disposal of surplus Federal property, the
Federal motor boat fuels tax, and oil and gas lease
revenues. About 90 percent of that fund now
derives from Outer Continental Shelf oil and gas
leases. The Federal Government receives
40 percent of that fund to acquire and develop
nationally significant lands. Another source of
funding to purchase land is the Migratory Bird
Conservation Fund (MBCF), which derives from
Federal Duck Stamp revenue.

We plan to use both funds to buy either full or partial interests in lands within the project area. LWCF funds will be used to acquire land and easements that consist mainly of forest and agricultural fields, roughly 80% of the proposed expansion area. MBCF funds may be used for properties that include large tracts of tidal marsh or forested wetlands important to waterfowl, the remaining 20%. North American Wetland Conservation Act funding is another potential source for this latter category.

#### **Donation**

We generally encourage donations in fee title or conservation easement within the approved areas, assuming management concerns, such as contaminants, are not a major issue. Owners sometimes choose to donate all or a portion of their land because of tax advantages or as a lasting memorial. We are not currently aware of any opportunities to accept donations of parcels within our proposed boundary, but would evaluate them on a case-by-case basis as they arise.

#### **Exchange**

We have the authority to exchange land in Service ownership for other land that has greater habitat or wildlife value. Inherent in this concept is the requirement to get dollar-for-dollar value, with, occasionally, an equalization payment. Exchanges are attractive because they usually do not increase Federal land holdings or require purchase funds; however, they also may be very labor-intensive, and take a long time to complete.

#### **Transfer**

Property can be transferred to the Service through the General Services Administration (GSA) under the Federal Property and Administrative Service Act (63 Stat. 377) and Public Law 80-537 (62 Stat. 240). The refuge was originally established in 1984 through transfer land declared excess by the military, formerly the Cape Charles Air Force Station. The only property within the proposal area for which transfer could be a potential method is the 60-acre County property within the refuge's original acquisition boundary, LPP Tract 3.

This is former Federal land, transferred to the County at no cost when the military base closed. It could be voluntarily reverted back, through the National Park Service to the General Services Administration, for transfer into the Refuge System. The Service already has a Cooperative Agreement in place with the County for management of this tract.

#### **Service Land Acquisition Policies**

Once a refuge acquisition boundary is approved we will contact landowners to determine if any are interested in selling. If a landowner expresses an interest and gives permission, a real estate appraiser will appraise the property to determine the market value. Once an appraisal is conducted, we can present an offer for the landowner's consideration.

The Service's established policy is to work with willing sellers, as funds become available. We will continue to operate under this long-standing policy. Appraisals are conducted by Service or contract appraisers and meet federal as well as professional standards. The Service is required by law to purchase properties at fair market value, based on comparable sales of similar types of properties.

The acquisition boundary is based on biological importance of key habitats, and merely gives the Service the approval to negotiate with landowners that may be interested, or become interested in the future. With internal approvals in place, the Service can react more quickly if these important lands become available. Lands within this boundary do not become part of the refuge unless sold or donated to the Service.

A landowner may choose to sell land to the Service in fee simple and retain the right to occupy an existing residence. This is referred to as a "**life-use reservation**." As the name implies, life-use reservations apply to the seller's lifetime, but they can also apply for a specific number of years. At the time we acquire the parcel, we would discount from the appraised value of the buildings and land the term of the reservation. The occupant would be responsible for the upkeep on the reserved premises. We would own the land, and make revenue-sharing payments to the County.

In rare circumstances "friendly condemnation" can be used at the request of a seller. Although the Service has a long-standing policy of acquiring land only from willing sellers, it does have the power of eminent domain, like other Federal agencies. Friendly condemnation is used when the Service and a seller cannot agree on property value, and both agree to allow a Court to determine fair market value. Or, where we cannot determine the rightful owner of a property, we may use friendly condemnation to clear title. We do not expect to use friendly condemnation very often, if at all.

#### VII. Coordination

The Service has participated in a looselyorganized Southern Tip Partners planning group since the mid-80's. This local partnership has promoted and facilitated protection of the area's important natural resources while encouraging sustainable economic development and ecotourism. The group has included participation from:

Northampton County
Commonwealth of Virginia State Delegate
U.S. Representative Bateman's, Davis', and
Schrock's Offices
The Nature Conservancy
Local landowner representatives
Virginia Dept. of Game and Inland Fisheries
Virginia Dept. of Conservation and Recreation
Virginia Coastal Program
The Trust for Public Lands
other invited participants/researchers/officials.

Several goals of this partnership's original 1987 plan have been accomplished, including expansion of the refuge, completion of the adjacent Fisherman Island NWR, creation of nearby Kiptopeke State Park, and establishment of a Refuge visitor center.

We continue to receive support from and work closely with the Virginia Department of Game and Inland Fisheries, the Virginia Division of Natural Heritage, Kiptopeke State Park, Virginia Tech's National Fish and Wildlife Information Exchange, the Virginia GAP Analysis Project, the Center for Conservation Biology at the College of William and Mary, the Coastal Virginia Wildlife Observatory, and other researchers. The Service's Delaware Bay Estuary Project office supported planning with its Delmarva Conservation Corridor analysis.

The Service has assisted Northampton County with its Port of Cape Charles Sustainable Technology Industrial Park, through a \$798,000 National Coastal Wetlands Grant for habitat protection. This project was designated by the President's Council on Sustainable Development as the only rural of four national demonstration

sites. Other National Coastal Wetlands Grants have been approved elsewhere in the county, including TNC and Division of Natural Heritage proposals.

As part of the draft CCP/EA planning process, we convened a biological workshop to gather input from experts and researchers regarding wildlife status and needs on the lower peninsula. We also held three open-house public meetings and sent out newsletters and surveys to solicit public comments on various refuge aspects and issues, including Service land acquisition. Comments regarding expansion of the refuge and protection of additional habitat were supportive.

This LPP will be distributed to all affected landowners, our conservation partners, County offices, and others. It was previously available for a public comment and discussed in public meetings.

### VIII. Socioeconomic and Cultural Impacts

The history and culture of the Eastern Shore have been intimately tied to these migratory bird resources for generations and would be severely impacted by their loss. Ecotourism based on these avian resources has become a local growth industry. The fall migration of neotropical birds on the lower peninsula is the subject of an annual birding festival that generates income for numerous hotels, restaurants, and other tourist facilities. The proposed project is non-invasive and will have no negative impacts on any existing cultural or historical resources.

The Refuge contributes to the economy of Northampton County by keeping land in permanent open space. This benefit was documented in a "Cost of Community Services Study(COCS)" for Northampton County, Virginia (Adams, et. al., 1999). A COCS is a case study analysis of the net fiscal impacts of different land uses. It provides a snapshot in time of costs versus revenues based on current land use. These studies are based on real budgets for a specific community. The analysis shows what services

private residents receive in return for the taxes they pay to their local community.

These studies have shown time and again that open space costs towns less than residential or commercial development. The reason for this is because residential, and to a lesser extent commercial development, requires certain town services such as schools, utilities, and emergency services. Although residential and commercial development increases a town's tax base, expenses incurred by the town for increased services far outweigh the taxes generated from residential and commercial uses.

The Refuge also directly contributes to the local economy of Northampton County through "Refuge Revenue Sharing" payments. The federal government does not pay property tax on Refuge lands, but instead makes annual payments to respective counties based on a maximum of 0.75 percent of the fair market value of Refuge lands, as determined by an appraisal every five years. The actual amount distributed each year varies and is based on Congressional appropriations in a given budget year. The amount distributed also changes as new lands are acquired. The table below depicts the amounts distributed to Northampton County between 1995 and 2002.

**Table 5.** Refuge Revenue Sharing payments from Eastern Shore of Virginia and Fisherman Island Refuges to Northampton County.

	Number of	Acres	Total Paid to Northampton County		
	Eastern Shore of Virginia Refuge	e of Island Sh inia Refuge Vi		Fisherman Island Refuge	
1995	725	1,000	\$12,241	\$6,995	
1996	725	1,000	\$16,388	\$9,364	
1997	745	1,000	\$16,745	\$9,427	
1998	745	1,825	\$10,583	\$16,808	
1999	745	1,850	\$9,403	\$15,650	
2000	745	1,850	\$8,249	\$13,728	
2001	745	1,850	\$8,419	\$14,012	
2002	1,121	1,850	\$11,712	\$13,090	

The traditional villages and towns of the area are surrounded by farm lands and water, which provide livelihood to its residents and recreation to its visitors. Recreation includes deep water fishing, crabbing and shellfishing, camping, boating, beach-going, bicycling, hunting, canoeing, kayaking, and bird watching.

The area can be considered a seasonal destination area. Because of its location and natural amenities, tourism plays a larger role in its economy than the industry does for the state as a whole. A residential and marina community is under development, with associated recreational uses, including golf, boating and beachgoing.

We do not predict any significant adverse socioeconomic or cultural impacts. Towns will benefit from increased refuge revenue sharing payments, savings on the cost of community services, increased property values, increased watershed protection, maintenance of scenic values, and increased revenues to local businesses from refuge visitors.

We would continue to promote the six priority wildlife-dependent recreational uses of the National Wildlife Refuge System, including hunting, fishing, wildlife observation and photography, and environmental education and interpretation, where they are compatible with the management purposes of each refuge. The refuge currently has a hunting program, a wildlife trail system, wildlife observation sites, and environmental education stations. These would be expanded to new lands acquired. However, we would eliminate non-wildlife-dependent activities for lands that we acquire.

Refuge lands would increase protection for cultural resources in the area. Service ownership would protect known cultural sites against vandalism, and would protect as yet unidentified or undeveloped cultural sites from disturbance or destruction. Our interpretive and environmental education programs will continue to promote public understanding and appreciation of the area's rich cultural resources.

#### Eastern Shore of Virginia National Wildlife Refuge

#### Bibliography/References

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#### **Appendix A. Parcel Maps and Table**

The maps show existing refuge lands, our acquisition area, and all land parcels within that area. The corresponding table lists each parcel, its tax map and parcel number, ownership, acreage, our priority and recommended method for acquisition, and county zoning designation. The information is based on Northampton County GIS Tax Data as of March 2004.

We will acquire either full or partial interest in land parcels by fee purchase, as available from willing sellers over time and as the availability of funding allows. We also propose to develop cooperative management agreements with the county and several state agencies, for public lands within the project area. Definitions of each table column head follow.

**LPP tract number** our numerical identifier for each parcel within the proposed acquisition boundary

 Tax Map
 Northampton County tax map, or "insert" number

 Tax Parcel ID
 Northampton County tax parcel identification number

Ownership agency, organization, company or private landowner's last name

Acres acreage from Northampton County tax database

Priority Priority 1: those parcels with significant (over 1 acre) tracts of existing forested and shrub migration

habitat, located in the critical immediate southern tip area (from Cedar Grove south) and along the

bayside shoreline (between the bayshore and Route 645) north to Plantation Creek

Priority 2: those parcels with significant (over 1 acre) tracts of existing forested and shrub migration habitat, located along the seaside coastline (between the seaside coastline and Route 600) from Cedar

Grove north to Walls Landing Creek

Priority 3: those parcels that consist of predominantly agricultural land with no existing forest or

shrub (less than an acre) and no coastal connection

Priority 4: those relatively small parcels, generally less than 5 acres, that include collections of buildings such as residences, farm houses, barns, various tractor and equipment sheds, farm storage or processing buildings. Our intention is not to acquire residences and buildings, but to protect or restore

habitat, so these parcels will be evaluated on a case-by-case basis

Acquisition Method For lands within the proposed boundary, whether we would acquire fee title or conservation easement

(see discussion in "Acquisition Method"), or if we are proposing to develop a management agreement

**Zoning designation** Northampton County zoning designation for each parcel

LPP NO.	TAX MAP	SECTION	LOT	LASTNAME	DEEDED ACRES	PRIORITY	METHOD	ZONING
1	123	Α	3	COMMONWEALTH OF VIRGINIA	89.00+	1	COOPERATIVE AGREEMENT	С
2	123	Α	2	HEHL PROPERTIES L.L.C.	160.00	1	FEE or EASEMENT	С
3	118	Α	8	NORTHAMPTON COUNTY	10.00	1	COOPERATIVE AGREEMENT	С
3	118	Α	9	NORTHAMPTON COUNTY	50.49	1	COOPERATIVE AGREEMENT	С
4	117	Α	23	EASTERN SHORE PUBLIC SERVICE CO. OF VA.	0.91	1	FEE	A-1
5	118	Α	5	DIXON	380.00	1	FEE or EASEMENT	AFD
6	118	Α	4	DIXON	2.00	4	FEE	A-1
7	117	Α	21	MILLER	2.11	4	FEE	A-1
8	117	Α	20	LATIMER	2.53	4	FEE	A-1
9	117	Α	24	SHORE LANDVEST INC. (SUNSET BEACH RESORT)	41.00	1	EASEMENT	EB-CG
10	117	Α	18A	DIXON	12.05	1	FEE or EASEMENT	AFD
11	117	Α	17	DIXON	74.00	1	FEE or EASEMENT	AFD
12	117	Α	15	DIXON	46.00	1	FEE or EASEMENT	AFD
13	117	Α	14	DIXON	7.00	1	FEE or EASEMENT	AFD
14	117	Α	13	TROWER	5.00	1	FEE or EASEMENT	A-1
15	118	Α	13	LAMBERTSON	73.63	1	FEE or EASEMENT	A-1
16	117	Α	12	WILLIAMS	1.00	4	FEE	A-1
17	118	Α	2	BULL	669.30	1	FEE or EASEMENT	AFD
19	118	1	A	VALENTINE	0.35	4	FEE	A-1
20	117	Α	10B	EDMUNDS	5.37	3	FEE or EASEMENT	A-1
21	117	Α	10A	EDMUNDS	5.00	3	FEE or EASEMENT	A-1
22	117	Α	11	WELLS	0.43+	4	FEE	A-1
23	117	Α	9	SPADY	108.00	1	FEE or EASEMENT	A-1
24	117	Α	6E	LATIMER	1.00	4	FEE	A-1
25	117	2	E	LATIMER	33.30+	1	FEE or EASEMENT	A-1
26	117	Α	1	DICKINSON	7.08	1	FEE or EASEMENT	A-1
27	117	1	B1	LATIMER	32.50	1	FEE or EASEMENT	A-1
28	117	Α	4	HEATH	2.03	4	FEE	A-1
29	117	Α	6B	LATIMER	2.71	1	FEE or EASEMENT	A-1
30	117	Α	6C	SPENCER	1.04	4	FEE	A-1
31	117	Α	6A	LATIMER	1.00	4	FEE	A-1
32	117	Α	6D	LATIMER	3.04	1	FEE or EASEMENT	A-1
33	112	Α	109	PARSONS	55.00	3	FEE or EASEMENT	A-1
34	117	Α	8	DICKINSON	130.00	1	FEE or EASEMENT	A-1
35	112	Α	107A	PARSONS	24.00	1	FEE or EASEMENT	A-1
36	112	Α	107B	BULL	28.23	1	FEE or EASEMENT	A-1
37	113	Α	67	JONES	8.32	3	FEE or EASEMENT	A-1
39	113	1	A	LEWIS	1.00	3	FEE or EASEMENT	A-1
40	113	1	В	LEWIS	1.50	3	FEE or EASEMENT	A-1
41	113	1	С	LEWIS	1.50	3	FEE or EASEMENT	A-1
42	113	Α	66	RICHARD	3.06	4	FEE	A-1
43	113	1	D	LEWIS	4.44	4	FEE	A-1
44	113	Α	64	JONES / GOODWYN	164.41	1	FEE or EASEMENT	A-1
45	113	Α	64A	JONES	0.68+	3	FEE or EASEMENT	A-1
46	112	4	C2	HEATH	57.77	1	FEE or EASEMENT	A-1
47	112	Α	106A	GOINS	0.94+	4	FEE	A-1
48	112	Α	106	HEATH	58.87	1	FEE or EASEMENT	A-1

LPP NO.	TAX MAP	SECTION	LOT	LASTNAME	DEEDED ACRES	PRIORITY	METHOD	ZONING
49	112A2	2	1	COASTAL PROPERTIES-EAST INC	8.44	3	FEE or EASEMENT	A-1
50	112A2	2	2	COASTAL PROPERTIES-EAST INC	8.81	3	FEE or EASEMENT	A-1
51	112A2	2	3	COASTAL PROPERTIES-EAST INC	8.85	3	FEE or EASEMENT	A-1
52	112	3	В	LATIMER	14.00	3	FEE or EASEMENT	RV-R
53	112	Α	74	MADDOX	3.00	3	FEE or EASEMENT	RV-R
54	112	Α	75	MEARS	2.83	3	FEE or EASEMENT	RV-R
55	112	Α	94B	KELLAM	9.00	3	FEE or EASEMENT	AFD
56	112	Α	94	SMITH	20.00	3	FEE or EASEMENT	RV-R
57	112	Α	80	LYNN	12.75	1	FEE or EASEMENT	RV-R
58	112	Α	91	HEATH	82.12	1	FEE or EASEMENT	A-1
59	113	Α	63	JONES / GOODWYN	16.25	1	FEE or EASEMENT	A-1
60	113	Α	61	HEATH	11.77	1	FEE or EASEMENT	A-1
61	113	Α	62	HEATH	10.83	1	FEE or EASEMENT	A-1
62	113	Α	60	HEATH	99.58	1	FEE or EASEMENT	A-1
63	113	Α	49	THE NATURE CONSERVANCY	40.00	1	FEE or EASEMENT	A-1
64	113	Α	50	THE NATURE CONSERVANCY	2.00	1	FEE or EASEMENT	RV-R
65	113	Α	51	THE NATURE CONSERVANCY	0.75	1	FEE or EASEMENT	RV-R
66	113	Α	52	HEATH	100.00	1	FEE or EASEMENT	A-1
67	113	Α	59	EUDY	40.00	1	FEE or EASEMENT	A-1
68	112	A	85	ROOKS	6.00	1	FEE or EASEMENT	A-1
69	112	2	2	STILLWELL	5.00	1	FEE or EASEMENT	RV-R
70	112	A	79	AMES	5.00	1	FEE or EASEMENT	A-1
71	112	A	78B	DANIELS	4.00	1	FEE or EASEMENT	A-1
72	112	A	78A	JERNIGAN	4.00	1	FEE or EASEMENT	A-1
73	112	A	32B	HARRISON	4.00	1	FEE or EASEMENT	A-1
74	112	A	26	NOBLE / PARSONS	2.50	1	FEE or EASEMENT	RV-R
75	113	A	58	SCOTT	16.70	3	FEE or EASEMENT	A-1
76	113	A	1	SCOTT	62.97	2	FEE or EASEMENT	A-1
77	113	A	8	HEATH	45.17	3	FEE or EASEMENT	A-1
78	113	A	42	O'CONNER	21.00	2	FEE or EASEMENT	A-1
79	113	A	43	O'CONNER	1.00	2	FEE or EASEMENT	A-1
80	113	A	46	THE NATURE CONSERVANCY	2.01+	2	FEE or EASEMENT	A-1
81	113	A	42A	THE NATURE CONSERVANCY	28.19	2	FEE or EASEMENT	RV-R
82	113	A	48	THE NATURE CONSERVANCY	2.50	2	FEE or EASEMENT	A-1
83	113	A	47	MORRIS	0.12+	4	FEE	A-1
84	113	A	41	O'CONNER	6.00	2	FEE or EASEMENT	A-1
85	113	A	40	WILLIAMS	5.00	2	FEE or EASEMENT	A-1
86	113	A	37	WILDLIFE MANAGEMENT LLC	8.16	2	FEE or EASEMENT	A-1
87	113	A	36	WILDLIFE MANAGEMENT LLC	9.08	3	FEE or EASEMENT	A-1
88	113	A	35	WILDLIFE MANAGEMENT LLC	45.20	2	FEE or EASEMENT	A-1
89	113	A	33	WILDLIFE MANAGEMENT LLC	25.20	2	FEE or EASEMENT	A-1 A-1
90	106	A	86A	WILDLIFE MANAGEMENT LLC	26.00	2	FEE or EASEMENT	A-1 A-1
90	106	A	86	WILDLIFE MANAGEMENT LLC	10.00	3	FEE or EASEMENT	A-1 A-1
92	106	A	87	WILDLIFE MANAGEMENT LLC	23.00	2	FEE or EASEMENT	A-1 A-1
93	106	A	89	HAMILTON	13.00	3	FEE or EASEMENT	RV-R
94	106	2	В	SCOTT	12.03	3	FEE or EASEMENT	RV-R
						2		
95	106	Α	83	WILDLIFE MANAGEMENT LLC	133.70	2	FEE or EASEMENT	A-1

LPP NO.	TAX MAP	SECTION	LOT	LASTNAME	DEEDED ACRES	PRIORITY	METHOD	ZONING
96	106	Α	71	WILDLIFE MANAGEMENT LLC	66.00	2	FEE or EASEMENT	A-1
97	106	Α	68	WILDLIFE MANAGEMENT LLC	1.99	3	FEE or EASEMENT	A-1
98	106	Α	67	WILDLIFE MANAGEMENT LLC	5.00	3	FEE or EASEMENT	A-1
99	106	Α	66	WILDLIFE MANAGEMENT LLC	52.00	2	FEE or EASEMENT	A-1
100	106	Α	69	WILDLIFE MANAGEMENT LLC	150.04	2	FEE or EASEMENT	A-1
101	106	Α	70	WILDLIFE MANAGEMENT LLC	12.00	2	FEE or EASEMENT	A-1
102	112	Α	62	DICKINSON	56.39	1	FEE or EASEMENT	A-1
103	112	Α	63	KELLAM	64.31	3	FEE or EASEMENT	AFD
104	112	Α	64	CARLISLE	3.00	3	FEE or EASEMENT	RV-R
105	112	Α	39	SPADY	26.96	3	FEE or EASEMENT	RV-R
106	112	Α	60	KELLAM	25.00	3	FEE or EASEMENT	AFD
107	112	Α	59	AMES	3.00	3	FEE or EASEMENT	A-1
108	112	Α	57	AMES	1.00	3	FEE or EASEMENT	A-1
109	112	Α	58	ROBINSON	0.66+	3	FEE or EASEMENT	A-1
110	112	Α	56	ROBINSON	11.00	3	FEE or EASEMENT	A-1
111	112	Α	1	DAVIS	84.29	1	FEE or EASEMENT	AFD
112	105	Α	94	MORRIS	250.26	1	FEE or EASEMENT	AFD
113	104	Α	15C	GOFFIGON / NOTTINGHAM	1.00	1	FEE or EASEMENT	A-1
114	104	Α	14	MORRIS	1.00	1	FEE or EASEMENT	A-1
116	104	Α	15B	NOTTINGHAM	12.14	1	FEE or EASEMENT	A-1
117	104	Α	15A	PICKETT'S HARBOR LIMITED PARTNERSHIP	22.81	1	FEE or EASEMENT	A-1
118	105	Α	95	GOFFIGON / NOTTINGHAM	103.94	1	FEE or EASEMENT	A-1
119	105	Α	95A	BRAGG	3.15	4	FEE	A-1
120	105	Α	96	MORRIS	5.00	1	FEE or EASEMENT	A-1
121	105	Α	97	MORRIS	4.24	1	FEE or EASEMENT	A-1
122	105	Α	98	PICOTT	4.24	1	FEE or EASEMENT	A-1
123	105B	1	5	LEWIS	0.33+	3	FEE or EASEMENT	A-1
124	105B	1	4	HARMON	0.20+	3	FEE or EASEMENT	A-1
125	105B	1	3	SESSOMS	0.22+	3	FEE or EASEMENT	A-1
126	105B	1	2	FITCHETT	0.29+	3	FEE or EASEMENT	A-1
127	105B	1	1	FAIRLEY	0.26+	3	FEE or EASEMENT	A-1
128	105	Α	99	MOSES	10.08	1	FEE or EASEMENT	A-1
129	105	Α	100	YAROS	28.95	1	FEE or EASEMENT	AFD
130	105	Α	101	SMITH	1.51	4	FEE	A-1
131	105	Α	100A	YAROS	1.00	4	FEE	A-1
132	105	Α	102	NOTTINGHAM	50.70	1	FEE or EASEMENT	RV-R
133	105	Α	103	MORRIS	14.00	1	FEE or EASEMENT	RV-R
134	104	Α	12	DETWILER	123.14	1	FEE or EASEMENT	A-1
135	104	Α	12A	NOTTINGHAM	0.81	4	FEE	A-1
136	104	Α	15D	GOFFIGON	5.72	1	FEE or EASEMENT	A-1
137	104	Α	10	NOTTINGHAM	16.38	1	FEE or EASEMENT	A-1
138	104	Α	6B	JOYCE	23.18	1	FEE or EASEMENT	A-1
139	104	Α	6A	CAMERON	4.86	1	FEE or EASEMENT	A-1
140	104	Α	5	ELLIS	6.75	1	FEE or EASEMENT	A-1
141	104C	1	1	CAPITOL HILL LLC	5.00	3	FEE or EASEMENT	A-1
142	104C	1	2	PACE	5.00	1	FEE or EASEMENT	A-1
143	104C	1	Α	STEPHENS / STEIDL	1.43	1	FEE or EASEMENT	A-1

LPP NO.	TAX MAP	SECTION	LOT	LASTNAME	DEEDED ACRES	PRIORITY	METHOD	ZONING
144	104C	1	8	CAMERIERI	3.03	1	FEE or EASEMENT	A-1
145	104C	1	7	HENNING	1.84	1	FEE or EASEMENT	A-1
146	104C	1	6	HUBBARD	5.02	1	FEE or EASEMENT	A-1
147	104C	1	5	HUBBARD	5.06	1	FEE or EASEMENT	A-1
148	104C	1	4	VARGAS	5.07	1	FEE or EASEMENT	A-1
149	104C	1	3	MEAKIN	5.07	1	FEE or EASEMENT	A-1
150	104C	1	В	MEAKIN	5.00	3	FEE or EASEMENT	A-1
151	104	Α	3E	K DEVELOPMENT CORPORATION	3.00	3	FEE or EASEMENT	A-1
152	104	Α	3D	SPOHN	19.54	1	FEE or EASEMENT	A-1
153	104	Α	3F	COLLIER	13.58	1	FEE or EASEMENT	A-1
154	104	Α	13	WORRELL	3.00	4	FEE	RV-R
155	104	Α	3A	GENERAL FARMS & LAND COMPANY	62.88	1	FEE or EASEMENT	A-1
156	104	Α	3	GENERAL FARMS & LAND COMPANY	49.00	1	FEE or EASEMENT	A-1
157	104	Α	4A	PRETTYMAN	5.00	1	FEE or EASEMENT	A-1
158	104	Α	4	MANUEL	40.75	1	FEE or EASEMENT	A-1
159	104	A	3C	DELSIGNORE	2.00	4	FEE	A-1
160	104	A	3B	MANUEL FAMILY LIMITED PARTNERSHIP	2.50	3	FEE or EASEMENT	A-1
161	104	A	6	WAGNER	91.92	1	FEE or EASEMENT	A-1
162	104	A	2	DICKINSON	336.00	1	FEE or EASEMENT	A-1
163	105	A	1	GENERAL FARMS & LAND COMPANY	9.00	3	FEE or EASEMENT	RV-R
164	105	A	2	INGRAM	1.00	4	FEE	RV-R
165	97	A	8	DIXON	142.00	1	FEE or EASEMENT	A-1
166	98	A	56	CURLING	86.43	1	FEE or EASEMENT	A-1
167	98	A	59A	CURLING	38.00	1	FEE or EASEMENT	A-1
168	97	A	4A	PARSONS	85.00	1	FEE or EASEMENT	A-1
169	97	A	4	PARSONS	65.00	1	FEE or EASEMENT	A-1
170	97	A	10A	KABLER IRREVOCABLE TRUST II	15.50	1	FEE or EASEMENT	A-1
171	97	A	9	HAND	171.31+	1	FEE or EASEMENT	A-1
172	97	A	10	VANN	29.50	1	FEE or EASEMENT	A-1
173	117	2	F	LATIMER	17.01+	1	FEE or EASEMENT	A-1
174	117	2	F	LATIMER	5.47+	1	FEE or EASEMENT	A-1
175	117	A	7	LATIMER	1.18+	1	FEE or EASEMENT	A-1
176	117	2	F	LATIMER	2.26+	1	FEE or EASEMENT	A-1
177	117	1	A	LATIMER	7.07	1	FEE or EASEMENT	A-1 A-1
178	117	1	D1	LATIMER	11.09	1	FEE or EASEMENT	A-1 A-1
				LATIMER				
179	117	1	G F		1.25	1	FEE or EASEMENT	A-1
180 181	117 117	1	E	LATIMER LATIMER	1.25 1.25	<u> </u>	FEE or EASEMENT	A-1 A-1
							FEE or EASEMENT	
182	117	1	A	LATIMER	7.07	3	FEE or EASEMENT	A-1
183	112	4	C1	HEATH	26.00	1	FEE or EASEMENT	A-1
184	112	4	C3	HEATH	17.61	1	FEE or EASEMENT	A-1
185	112	3	A	LATIMER	8.56	3	FEE or EASEMENT	RV-R
186	104	Α	6C	WAYMAN	1.00	3	FEE or EASEMENT	A-1
187	97	2	1	HAND	8.54+	1	FEE or EASEMENT	A-1
188	97	2	2	HAND	7.93+	1	FEE or EASEMENT	A-1
189	97	2	3	HORNBACHER / FILLION	5.81+	1	FEE or EASEMENT	A-1

LPP NO.	TAX MAP	SECTION	LOT	LASTNAME	DEEDED ACRES	PRIORITY	METHOD	ZONING
190				VDCR KIPTOPEKE STATE PARK	[535]	1	COOPERATIVE AGREEMENT	С
191				VDGIF STATE WMA - GATR TRACT	[356]	1	COOPERATIVE AGREEMENT	C
192				VDCR/HERITAGE TROWER NATURAL AREA	[35]	1	COOPERATIVE AGREEMENT	С
Notes: 1) numbers 1	8, 38, and 1	15 have not l	been used.					
2) the informa	tion in this ta	able is provid	ded courtesy of Northa	impton County, from the GIS tax databaseplease be	aware that it is still in	the quality cont	rol stage of proof-reading/editing.	
3) acres colu	mn displays	deeded acre	eage from county tax of	database, except where not availableacreage marke	ed " + " are estimate	d measurements	s from GIS map layer.	
				ower Natural Area are not part of the 6,030-acre expansion				
Date: May 18,	2004							

LPP NO.	TAX MAP	SECTION	LOT	LASTNAME	DEEDED ACRES	PRIORITY	METHOD	ZONING
49	112A2	2	1	COASTAL PROPERTIES-EAST INC	8.44	3	FEE or EASEMENT	A-1
50	112A2	2	2	COASTAL PROPERTIES-EAST INC	8.81	3	FEE or EASEMENT	A-1
51	112A2	2	3	COASTAL PROPERTIES-EAST INC	8.85	3	FEE or EASEMENT	A-1
52	112	3	В	LATIMER	14.00	3	FEE or EASEMENT	RV-R
53	112	Α	74	MADDOX	3.00	3	FEE or EASEMENT	RV-R
54	112	Α	75	MEARS	2.83	3	FEE or EASEMENT	RV-R
55	112	Α	94B	KELLAM	9.00	3	FEE or EASEMENT	AFD
56	112	Α	94	SMITH	20.00	3	FEE or EASEMENT	RV-R
57	112	Α	80	LYNN	12.75	1	FEE or EASEMENT	RV-R
58	112	Α	91	HEATH	82.12	1	FEE or EASEMENT	A-1
59	113	Α	63	JONES / GOODWYN	16.25	1	FEE or EASEMENT	A-1
60	113	Α	61	HEATH	11.77	1	FEE or EASEMENT	A-1
61	113	Α	62	HEATH	10.83	1	FEE or EASEMENT	A-1
62	113	Α	60	HEATH	99.58	1	FEE or EASEMENT	A-1
63	113	Α	49	THE NATURE CONSERVANCY	40.00	1	FEE or EASEMENT	A-1
64	113	Α	50	THE NATURE CONSERVANCY	2.00	1	FEE or EASEMENT	RV-R
65	113	Α	51	THE NATURE CONSERVANCY	0.75	1	FEE or EASEMENT	RV-R
66	113	Α	52	HEATH	100.00	1	FEE or EASEMENT	A-1
67	113	Α	59	EUDY	40.00	1	FEE or EASEMENT	A-1
68	112	A	85	ROOKS	6.00	1	FEE or EASEMENT	A-1
69	112	2	2	STILLWELL	5.00	1	FEE or EASEMENT	RV-R
70	112	A	79	AMES	5.00	1	FEE or EASEMENT	A-1
71	112	A	78B	DANIELS	4.00	1	FEE or EASEMENT	A-1
72	112	A	78A	JERNIGAN	4.00	1	FEE or EASEMENT	A-1
73	112	A	32B	HARRISON	4.00	1	FEE or EASEMENT	A-1
74	112	A	26	NOBLE / PARSONS	2.50	1	FEE or EASEMENT	RV-R
75	113	A	58	SCOTT	16.70	3	FEE or EASEMENT	A-1
76	113	A	1	SCOTT	62.97	2	FEE or EASEMENT	A-1
77	113	A	8	HEATH	45.17	3	FEE or EASEMENT	A-1
78	113	A	42	O'CONNER	21.00	2	FEE or EASEMENT	A-1
79	113	A	43	O'CONNER	1.00	2	FEE or EASEMENT	A-1
80	113	A	46	THE NATURE CONSERVANCY	2.01+	2	FEE or EASEMENT	A-1
81	113	A	42A	THE NATURE CONSERVANCY	28.19	2	FEE or EASEMENT	RV-R
82	113	A	48	THE NATURE CONSERVANCY	2.50	2	FEE or EASEMENT	A-1
83	113	A	47	MORRIS	0.12+	4	FEE	A-1
84	113	A	41	O'CONNER	6.00	2	FEE or EASEMENT	A-1
85	113	A	40	WILLIAMS	5.00	2	FEE or EASEMENT	A-1
86	113	A	37	WILDLIFE MANAGEMENT LLC	8.16	2	FEE or EASEMENT	A-1
87	113	A	36	WILDLIFE MANAGEMENT LLC	9.08	3	FEE or EASEMENT	A-1
88	113	A	35	WILDLIFE MANAGEMENT LLC	45.20	2	FEE or EASEMENT	A-1
89	113	A	33	WILDLIFE MANAGEMENT LLC	25.20	2	FEE or EASEMENT	A-1 A-1
90	106	A	86A	WILDLIFE MANAGEMENT LLC	26.00	2	FEE or EASEMENT	A-1 A-1
90	106	A	86	WILDLIFE MANAGEMENT LLC	10.00	3	FEE or EASEMENT	A-1 A-1
92	106	A	87	WILDLIFE MANAGEMENT LLC	23.00	2	FEE or EASEMENT	A-1 A-1
93	106	A	89	HAMILTON	13.00	3	FEE or EASEMENT	RV-R
94	106	2	В	SCOTT	12.03	3	FEE or EASEMENT	RV-R
						2		
95	106	Α	83	WILDLIFE MANAGEMENT LLC	133.70	2	FEE or EASEMENT	A-1

LPP NO.	TAX MAP	SECTION	LOT	LASTNAME	DEEDED ACRES	PRIORITY	METHOD	ZONING
96	106	Α	71	WILDLIFE MANAGEMENT LLC	66.00	2	FEE or EASEMENT	A-1
97	106	Α	68	WILDLIFE MANAGEMENT LLC	1.99	3	FEE or EASEMENT	A-1
98	106	Α	67	WILDLIFE MANAGEMENT LLC	5.00	3	FEE or EASEMENT	A-1
99	106	Α	66	WILDLIFE MANAGEMENT LLC	52.00	2	FEE or EASEMENT	A-1
100	106	Α	69	WILDLIFE MANAGEMENT LLC	150.04	2	FEE or EASEMENT	A-1
101	106	Α	70	WILDLIFE MANAGEMENT LLC	12.00	2	FEE or EASEMENT	A-1
102	112	Α	62	DICKINSON	56.39	1	FEE or EASEMENT	A-1
103	112	Α	63	KELLAM	64.31	3	FEE or EASEMENT	AFD
104	112	Α	64	CARLISLE	3.00	3	FEE or EASEMENT	RV-R
105	112	Α	39	SPADY	26.96	3	FEE or EASEMENT	RV-R
106	112	Α	60	KELLAM	25.00	3	FEE or EASEMENT	AFD
107	112	Α	59	AMES	3.00	3	FEE or EASEMENT	A-1
108	112	Α	57	AMES	1.00	3	FEE or EASEMENT	A-1
109	112	Α	58	ROBINSON	0.66+	3	FEE or EASEMENT	A-1
110	112	Α	56	ROBINSON	11.00	3	FEE or EASEMENT	A-1
111	112	Α	1	DAVIS	84.29	1	FEE or EASEMENT	AFD
112	105	Α	94	MORRIS	250.26	1	FEE or EASEMENT	AFD
113	104	Α	15C	GOFFIGON / NOTTINGHAM	1.00	1	FEE or EASEMENT	A-1
114	104	Α	14	MORRIS	1.00	1	FEE or EASEMENT	A-1
116	104	Α	15B	NOTTINGHAM	12.14	1	FEE or EASEMENT	A-1
117	104	Α	15A	PICKETT'S HARBOR LIMITED PARTNERSHIP	22.81	1	FEE or EASEMENT	A-1
118	105	Α	95	GOFFIGON / NOTTINGHAM	103.94	1	FEE or EASEMENT	A-1
119	105	Α	95A	BRAGG	3.15	4	FEE	A-1
120	105	Α	96	MORRIS	5.00	1	FEE or EASEMENT	A-1
121	105	Α	97	MORRIS	4.24	1	FEE or EASEMENT	A-1
122	105	Α	98	PICOTT	4.24	1	FEE or EASEMENT	A-1
123	105B	1	5	LEWIS	0.33+	3	FEE or EASEMENT	A-1
124	105B	1	4	HARMON	0.20+	3	FEE or EASEMENT	A-1
125	105B	1	3	SESSOMS	0.22+	3	FEE or EASEMENT	A-1
126	105B	1	2	FITCHETT	0.29+	3	FEE or EASEMENT	A-1
127	105B	1	1	FAIRLEY	0.26+	3	FEE or EASEMENT	A-1
128	105	Α	99	MOSES	10.08	1	FEE or EASEMENT	A-1
129	105	Α	100	YAROS	28.95	1	FEE or EASEMENT	AFD
130	105	Α	101	SMITH	1.51	4	FEE	A-1
131	105	Α	100A	YAROS	1.00	4	FEE	A-1
132	105	Α	102	NOTTINGHAM	50.70	1	FEE or EASEMENT	RV-R
133	105	Α	103	MORRIS	14.00	1	FEE or EASEMENT	RV-R
134	104	Α	12	DETWILER	123.14	1	FEE or EASEMENT	A-1
135	104	Α	12A	NOTTINGHAM	0.81	4	FEE	A-1
136	104	Α	15D	GOFFIGON	5.72	1	FEE or EASEMENT	A-1
137	104	Α	10	NOTTINGHAM	16.38	1	FEE or EASEMENT	A-1
138	104	Α	6B	JOYCE	23.18	1	FEE or EASEMENT	A-1
139	104	Α	6A	CAMERON	4.86	1	FEE or EASEMENT	A-1
140	104	Α	5	ELLIS	6.75	1	FEE or EASEMENT	A-1
141	104C	1	1	CAPITOL HILL LLC	5.00	3	FEE or EASEMENT	A-1
142	104C	1	2	PACE	5.00	1	FEE or EASEMENT	A-1
143	104C	1	Α	STEPHENS / STEIDL	1.43	1	FEE or EASEMENT	A-1

LPP NO.	TAX MAP	SECTION	LOT	LASTNAME	DEEDED ACRES	PRIORITY	METHOD	ZONING
144	104C	1	8	CAMERIERI	3.03	1	FEE or EASEMENT	A-1
145	104C	1	7	HENNING	1.84	1	FEE or EASEMENT	A-1
146	104C	1	6	HUBBARD	5.02	1	FEE or EASEMENT	A-1
147	104C	1	5	HUBBARD	5.06	1	FEE or EASEMENT	A-1
148	104C	1	4	VARGAS	5.07	1	FEE or EASEMENT	A-1
149	104C	1	3	MEAKIN	5.07	1	FEE or EASEMENT	A-1
150	104C	1	В	MEAKIN	5.00	3	FEE or EASEMENT	A-1
151	104	Α	3E	K DEVELOPMENT CORPORATION	3.00	3	FEE or EASEMENT	A-1
152	104	Α	3D	SPOHN	19.54	1	FEE or EASEMENT	A-1
153	104	Α	3F	COLLIER	13.58	1	FEE or EASEMENT	A-1
154	104	Α	13	WORRELL	3.00	4	FEE	RV-R
155	104	Α	3A	GENERAL FARMS & LAND COMPANY	62.88	1	FEE or EASEMENT	A-1
156	104	Α	3	GENERAL FARMS & LAND COMPANY	49.00	1	FEE or EASEMENT	A-1
157	104	Α	4A	PRETTYMAN	5.00	1	FEE or EASEMENT	A-1
158	104	Α	4	MANUEL	40.75	1	FEE or EASEMENT	A-1
159	104	A	3C	DELSIGNORE	2.00	4	FEE	A-1
160	104	A	3B	MANUEL FAMILY LIMITED PARTNERSHIP	2.50	3	FEE or EASEMENT	A-1
161	104	A	6	WAGNER	91.92	1	FEE or EASEMENT	A-1
162	104	A	2	DICKINSON	336.00	1	FEE or EASEMENT	A-1
163	105	A	1	GENERAL FARMS & LAND COMPANY	9.00	3	FEE or EASEMENT	RV-R
164	105	A	2	INGRAM	1.00	4	FEE	RV-R
165	97	A	8	DIXON	142.00	1	FEE or EASEMENT	A-1
166	98	A	56	CURLING	86.43	1	FEE or EASEMENT	A-1
167	98	A	59A	CURLING	38.00	1	FEE or EASEMENT	A-1
168	97	A	4A	PARSONS	85.00	1	FEE or EASEMENT	A-1
169	97	A	4	PARSONS	65.00	1	FEE or EASEMENT	A-1
170	97	A	10A	KABLER IRREVOCABLE TRUST II	15.50	1	FEE or EASEMENT	A-1
171	97	A	9	HAND	171.31+	1	FEE or EASEMENT	A-1
172	97	A	10	VANN	29.50	1	FEE or EASEMENT	A-1
173	117	2	F	LATIMER	17.01+	1	FEE or EASEMENT	A-1
174	117	2	F	LATIMER	5.47+	1	FEE or EASEMENT	A-1
175	117	A	7	LATIMER	1.18+	1	FEE or EASEMENT	A-1
176	117	2	F	LATIMER	2.26+	1	FEE or EASEMENT	A-1
177	117	1	A	LATIMER	7.07	1	FEE or EASEMENT	A-1 A-1
178	117	1	D1	LATIMER	11.09	1	FEE or EASEMENT	A-1 A-1
178	117	1	G	LATIMER				A-1 A-1
			F		1.25	1	FEE or EASEMENT	
180 181	117 117	1	E	LATIMER LATIMER	1.25 1.25	<u> </u>	FEE or EASEMENT	A-1 A-1
							FEE or EASEMENT	
182	117	1	A	LATIMER	7.07	3	FEE or EASEMENT	A-1
183	112	4	C1	HEATH	26.00	1	FEE or EASEMENT	A-1
184	112	4	C3	HEATH	17.61	1	FEE or EASEMENT	A-1
185	112	3	A	LATIMER	8.56	3	FEE or EASEMENT	RV-R
186	104	Α	6C	WAYMAN	1.00	3	FEE or EASEMENT	A-1
187	97	2	1	HAND	8.54+	1	FEE or EASEMENT	A-1
188	97	2	2	HAND	7.93+	1	FEE or EASEMENT	A-1
189	97	2	3	HORNBACHER / FILLION	5.81+	1	FEE or EASEMENT	A-1

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190				VDCR KIPTOPEKE STATE PARK	[535]	1	COOPERATIVE AGREEMENT	С
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Notes: 1) numbers 1	8, 38, and 1	15 have not l	been used.					
2) the informa	tion in this ta	able is provid	ded courtesy of Northa	ampton County, from the GIS tax databaseplease be	aware that it is still in	the quality cont	rol stage of proof-reading/editing.	
3) acres colu	mn displays	deeded acre	eage from county tax of	database, except where not availableacreage marke	ed " + " are estimate	d measurements	s from GIS map layer.	
				ower Natural Area are not part of the 6,030-acre expansion				
Date: May 18,	2004							

# Eastern Shore of Virginia National Wildlife Refuge Land Protection Plan Index Map

Northampton County, Virginia



Projection/Datum:
UTM Zone 18, NAD83, Meters.
Map prepared by the R5 Cartograph

Map prepared by the R5 Cartography & Spatial Data Services Section.

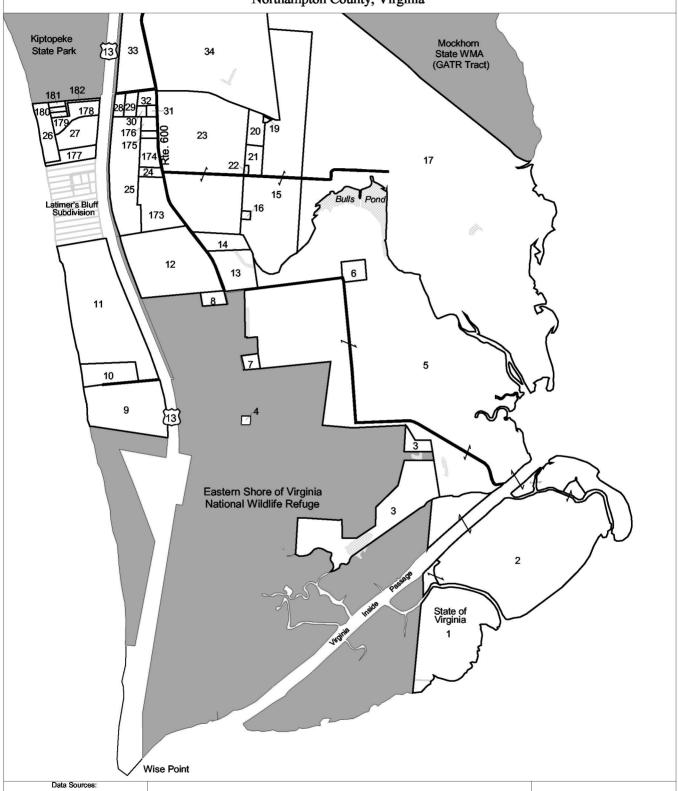
April 2004
This map is for planning purposes only.





## Eastern Shore of Virginia National Wildlife Refuge Land Protection Plan

Northampton County, Virginia



Digital Tax Map data produced and provided by Northampton County, VA (2/2004 update). All other data provided by U.S. Fish & Wildlife Service.

Projection/Datum: UTM Zone 18, NAD83, Meters. Map prepared by the R5 Cartography & Spatial Data Services Section. April 2004 This map is for planning purposes only.

0	1000	2000	3000	4000 Feet
<u> </u>	300	600	900	1200 Meters



## Eastern Shore of Virginia National Wildlife Refuge Land Protection Plan

Northampton County, Virginia



This map is for planning purposes only

#### Eastern Shore of Virginia National Wildlife Refuge Land Protection Plan Northampton County, Virginia **E3** 131 129 THE Trower Natural Area Preserve **Butlers Bluff** 107H 109 Subdivision Rte. 645 Kiptopeke State Park Data Sources: Digital Tax Map data produced and provided by Northampton County, VA (2/2004). All other data provided by U.S. Fish & Wildlife Service. 4000 Feet Projection/Datum: UTM Zone 18, NAD83, Meters. 1200 Meters Map prepared by the R5 Cartography & Spatial Data Services Section. April 2004

## Eastern Shore of Virginia National Wildlife Refuge Land Protection Plan

Northampton County, Virginia

